

IN THE SPECIFICATION

Please amend the header beginning on page 1, line 3 as follows:

~~Field of the Invention~~

FIELD OF THE INVENTION

Please amend the header beginning on page 1, line 8 as follows:

~~Background~~

BACKGROUND

Please amend the header beginning on page 2, line 23 as follows:

~~Summary~~

SUMMARY

Please amend the header beginning on page 3, line 4 as follows:

~~Brief Description of the Drawings~~

BRIEF DESCRIPTION OF THE DRAWINGS

Please amend the header beginning on page 3, line 11 as follows:

~~Detailed Description~~

DETAILED DESCRIPTION

Please amend the header beginning on page 18, line 4 as follows:

~~Abstract~~

ABSTRACT

Please amend the paragraph beginning on page 6, line 9 as follows:

Shown in the figure are four exemplary sensing and pacing channels designated “a” through “d” comprising bipolar leads with ring electrodes [[34]] 33a-d and tip electrodes [[33]] 34a-d, sensing amplifiers 31a-d, pulse generators 32a-d, and channel interfaces 30a-d. Each channel thus includes a pacing channel made up of the pulse generator connected to the electrode and a sensing channel made up of the sense amplifier connected to the electrode. The channel interfaces 30a-d communicate bidirectionally with microprocessor 10, and each interface may include analog-to-digital converters for digitizing sensing signal inputs from the sensing amplifiers and registers that can be written to by the microprocessor in order to output pacing pulses, change the pacing pulse amplitude, and adjust the gain and threshold values for the sensing amplifiers. The sensing circuitry of the pacemaker detects a chamber sense, either an atrial sense or ventricular sense, when an electrogram signal (i.e., a voltage sensed by an electrode representing cardiac electrical activity) generated by a particular channel exceeds a specified detection threshold. Pacing algorithms used in particular pacing modes employ such senses to trigger or inhibit pacing, and the intrinsic atrial and/or ventricular rates can be detected by measuring the time intervals between atrial and ventricular senses, respectively.